

1. A robust customizable computing system comprising:

10 a processing control unit;

15 an external object; and

means for operably connecting said processing control unit to said external object,

20 said processing control unit introducing intelligence into said external object and causing said external object to perform smart functions.

2. The robust customizable computer processing system of claim 1, wherein said processing control unit comprises:

10 an encasement module comprising:

15 a main support chassis having a plurality of wall supports and a plurality of junction centers containing means for supporting a computer component therein;

20 a dynamic back plane that provides support for connecting peripheral and other computing components directly to a system bus without requiring an interface;

means for enclosing said main support chassis and providing access to an interior portion of said encasement module;

25 one or more computer processing components disposed within said junction centers of said encasement module; and

means for cooling said interior portion of said encasement module.

3. The robust customizable computing system of claim 1, wherein said means for operably connecting comprises means for physically coupling said processing control unit to said external object, such that said processing control unit functions as a load bearing component.

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4. The robust customizable computing system of claim 1, further comprising at least one other processing control unit operably connected to said external object.

5. The robust customizable computing system of claim 1, wherein said processing 10 control unit comprises a load bearing structure.

6. The robust customizable computing system of claim 1, wherein said means for operably connecting comprises a direct connection via a universal port formed in a dynamic back plane on said processing control unit.

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7. The robust customizable computing system of claim 1, wherein said means for operably connecting comprises a wired connection that connects to a port formed within said processing control unit.

20 8. The robust customizable computing system of claim 1, wherein said means for operably connecting comprises a wireless connection.

9. The robust customizable computing system of claim 1, wherein said means for operably connecting comprises means for engaging an external object.

10. The robust customizable computing system of claim 9, wherein said means for 5 engaging an external object comprises a slide receiver formed on said processing control unit that functions to receive a matching insert located on an external object.

11. The robust customizable computing system of claim 1, wherein said external 10 object is selected from the group consisting of any object, system, device, apparatus, component, structure, component of a structure, item of manufacture, and inanimate object

12. The robust customizable computing system of claim 9, wherein said external 15 object comprises a workstation computer having snap-on peripheral devices that operably connect to said processing control unit.

13. The robust customizable computing system of claim 1, wherein said external object comprises circuitry, such that said processing control unit operably connects to 20 said circuitry.

14. The robust customizable computing system of claim 1, wherein said processing control unit is non-peripheral based.

15. A robust customizable computing system comprising:

an external object;

a processing control unit physically supporting said external object or a component of said external object; and

5 means for operably connecting said processing control unit to said external object, said processing control unit introducing intelligence into said external object and causing said external object to perform smart functions.

16. A method for introducing intelligence into an external object and enabling smart functions therein, said method comprising:

obtaining an external object;

operably connecting a processing control unit to said external object; and

5 initiating one or more computing functions within said processing control unit to cause said external object to perform smart functions.

17. The method of claim 16, wherein said processing control unit comprises:

a non-peripherals-based encasement module comprising:

10 a main support chassis for providing main support to said encasement module;

one or more plates removably coupled to said main support chassis for providing access to an interior portion of said encasement module;

one or more processing components removably disposed within said 15 encasement module; and

means for cooling said encasement module and dissipating heat to the surrounding ambient air.

18. The non-peripherals computer processing system of claim 17, wherein said

20 encasement is substantially cubical in shape, such that said encasement module comprises:

a main support chassis having first, second and third side wall supports;

first and second end plates removably coupled to said main support chassis and comprising a plurality of ventilation ports; a dynamic back plane removably coupled to said main support chassis; and a tri-board electrical printed circuit board configuration removably secured within said encasement module.